CURRENT STATUS OF THE CLAIMS

There are no amendments to the following claims, but the claims are provided here to indicate the current status of the claims pending in the application.

Claim 1. (Original) A porous bioceramics for bone scaffold comprising:

a biocompatible porous ceramic substrate having the property to thermal-decompose hydroxyapatite in contact with it;

a fluorapatite (FA) inner layer formed on said porous ceramic substrate; and

a hydroxyapatite (HA) outer layer formed on said fluorapatite inner layer.

Claim 2. (Original) The porous bioceramics according to claim 1, wherein the average size of pores in said porous ceramic substrate is 100 micron or more, and the pores are connected with each other.

Claim 3. (Original) The porous bioceramics according to claim 2, wherein said porous ceramic substrate is made of zirconia ($Zr0_2$).

Claim 4. (Original) The porous bioceramics according to claim 3, wherein said porous ceramic substrate has a porosity in the range between 92% and 74%.

Claim 5. (Original) The porous bioceramics according to claim 3, wherein said porous ceramic substrate has a compressive strength in the range between 1.6 MPa and 35 MPa.

Claim 6. (Original) The porous bioceramics according to claim 3, wherein the adhesive strength of HNFA double layer to said porous ceramic substrate is in the range of 20~30 MPa.

Claim 7. (Original) The porous bioceramics according to claim 3, wherein Zr0 of said porous ceramic substrate is yttria (Y_2O_3) stabilized $Zr0_2$.

Claim 8. (Original) The porous bioceramics according to claim 2, wherein said HA outer layer is made of a mixture of HA and other bioactive materials of calcium phosphates.

Claim 9. (Original) The porous bioceramics according to claim 2, wherein it further comprises a layer coated with one of other bioactive materials of calcium phosphates or their mixture on said HA outer layer.

Claim 10. (Original) A method for manufacturing a porous bioceramics for bone scaffold comprising the steps of:

forming a biocompatible porous ceramic substrate having the property to thermal-decompose hydroxyapatite in contact with it;

coating a fluorapatite (FA) inner layer on said porous ceramic substrate; and

coating a hydroxyapatite (HA) outer layer on said fluorapatite inner layer.

Claim 11. (Original) The method according to claim 10, wherein the average size of pores in said porous ceramic substrate is 100 micron or more, and the pores are connected with each other.

Claim 12. (Original) The method according to claim 11, wherein the step of forming said porous ceramic substrate comprises the steps of immersing a porous polymer template into the ceramic slurry and drying it; and thermal-treating the porous polymer template infiltrated with the ceramic slurry to burn out the porous polymer template and to obtain the sintered ceramic body.

Claim 13. (Original) The method according to claim 12, wherein the step of forming said porous ceramic substrate further comprises repeating the step of immersing and drying to adjust the porosity of said porous ceramic substrate.

Claim 14. (Original) The method according to claim 11, wherein the step of coating FA inner layer comprises the steps of immersing the formed porous ceramic substrate into the FA slurry and drying it; and thermal-treating the formed FA inner layer.

Claim 15. (Original) The method according to claim 11, wherein the step of coating HA outer layer comprises the steps of immersing the formed porous ceramic substrate coated with FA inner layer into HA slurry and drying it; and thermal-treating the formed HA outer layer.

Claim 16. (Original) The method according to claim 11, wherein said HA outer layer is made of a mixture of HA and other bioactive materials of calcium phosphates.

Claim 17. (Original) The method according to claim 11, wherein it further comprises the step of coating one of other bioactive materials of calcium phosphates or their mixture on said HA outer layer.